

Name: _____

at1124exam: Radicals and Squares (v812)

Question 1

Simplify the radical expressions.

$$\sqrt{98}$$

$$\sqrt{28}$$

$$\sqrt{50}$$

Question 2

Find all solutions to the equation below:

$$3((x - 8)^2 + 7) = 69$$

Question 3

By completing the square, find both solutions to the given equation. *You must show work for full credit!*

$$x^2 - 12x = -27$$

Question 4

A quadratic polynomial function is shown below in standard form.

$$y = 3x^2 + 30x + 81$$

Express the function in **vertex form** and identify the **location** of the vertex.